IN THE SPECIFICATION:

At page 1, prior to line 4, please insert a new heading and text as follows:

--CROSS-REFERENCE TO RELATED APPLICATION

This application is a continuation of International Application PCT/FI00/01148 having an international filing date of December 27, 2000 published in English July 18, 2002 under International Publication No. WO 02/056272 A1 and from which priority is claimed under all applicable sections of Title 35 of the United States Code including, but not limited to, Sections 120, 363 and 365(c).

BACKGROUND OF THE INVENTION

1. Technical Field--.

At page 1, prior to line 8, please insert a new heading as follows:

--2. Discussion of Related Art--.

The paragraph beginning at page 2, line 10 has been amended as follows:

--Considering the underlying physics, the centrifugal force F causing vibration, for a mass element rotating about a rotational axis is:

$$F = m \omega^2 r$$

wherein m is the mass of the mass element, ω is the angular speed of rotation (radians per second) and r is the offset of the mass element from the rotational axis. As the equation is linear with respect to m and r, the equation can be ~~generalised~~ generalized so that it refers to an infinitely small mass ~~centre~~ center of a real mass element that is not infinitely small. In this case, the mass m is the mass of the entire mass element and the radius r refers to the offset of the mass ~~centre~~ center from the rotational axis. The centrifugal force F causes thus a vibration

force. Hence, the vibration force giving an amplitude of vibration (which then depends on the mass of the entire device to be vibrated) is linearly proportional to the mass and offset of the mass ~~centre~~ center, but ~~squarely~~ proportional to the ~~square of the~~ angular speed (ω^2) and, correspondingly, ~~squarely~~ proportional to the ~~square of the~~ frequency of rotation. This explains why the amplitude of vibration is difficult to control by the rotational frequency, when inconvenient vibration frequencies are to be avoided.--

At page 3, prior to line 1, please insert a new heading as follows:

--DISCLOSURE OF INVENTION--.

The paragraph beginning at page 3, line 5 has been amended as follows:

--According to a first aspect of the invention there is provided a vibrating portable electronic device, comprising:

a body;

a driving axle having a rotational axis about which it rotates, the driving axle being rotatably supported by the body;

a weight unit comprising at least one weight element, the weight unit having a total mass m and being coupled to the driving axle for being rotated about the rotational axis of the driving axle,

wherein the weight unit has a mass ~~centre~~ center with an offset r with respect to the rotational axis, so that the vibration of the portable device assumes an amplitude of vibration depending on the product of the offset r and the mass m; and

an electrical motor for rotating the driving axle;

~~characterised~~ characterized in that the electrical motor

is adapted to adjust the product of the offset r and the mass m.--

The paragraph beginning at page 3, line 21 has been amended as follows:

--Preferably, the weight unit comprises at least two weight elements. Preferably, the electrical motor is adapted to adjust the angular disposition of the weight elements in order to change the offset r. By adjusting the offset r, the vibration of the device can be rapidly altered to and maintained on a desired level. This allows the vibration to be ~~synchronised~~ synchronized with a music signal or an audible informing signal.--

The paragraph beginning at page 5, line 23 has been amended as follows:

--Advantageously, the resilient member facilitates continuous and smooth adjustment of the product of the offset r and the mass m within a desired range ~~whilst~~ while the weight unit is rotating. This provides various advantages, such as adjusting the product to change the amplitude of vibration thus allowing indication of different vibration signals to a user.--

The paragraph beginning at page 5, line 29 and ending at page 6, line 7 has been amended as follows:

--In an alternative embodiment of the invention, two different angular dispositions of weight elements are ~~realised~~ realized by choice of one of the electrical motor to be electrically driven. In a first case, only one of the electrical motors is electrically driven in the first angular direction so that it drives mechanically the weight unit and the other electrical motor. The other electrical motor causes a friction force that makes the weight elements assume a first angular disposition with respect to each other. In a second case, the other electrical

motor is electrically driven in the first angular direction for mechanically driving the weight unit and the other electrical motor. The mechanically driven electrical motor causes a friction force that effects in the same angular direction as the resilient member so that the weight elements assume a second angular disposition with respect to each other.--

The paragraph beginning at page 6, line 13 has been amended as follows:

--According to a second aspect of the invention a method is provided for vibrating a portable electronic device comprising the steps of:

providing the device with a weight unit having a mass m and a mass ~~centre~~ center;

providing the device with a driving axle and an electrical motor;

coupling the electrical motor, driving axle and weight unit;

rotating the weight unit around a rotational axis by the electrical motor using the driving axle;

positioning the mass centre at an offset r with respect to the rotational axis for vibrating the device with an amplitude depending on the product of the offset r and the mass m;

~~characterised~~ characterized in that the method further comprises the step of:

adjusting the product of the offset r and the mass m by the electrical motor rotating the weight unit.--

The paragraph beginning at page 7, line 3 has been amended as follows:

--According to a third aspect of the present invention there is provided a method of messaging by vibrating a portable electronic device having coupled an electrical motor, a driving axle and a weight unit having a mass m with a mass ~~centre~~ center; the method

comprising the steps of:

receiving a message;

rotating the weight unit around a rotational axis by the electrical motor using the driving axle;

positioning the mass centre at an offset r with respect to the rotational axis for vibrating the device with an amplitude depending on the product of the offset r and the mass m;

~~characterised~~ characterized in that the method further comprises the step of:

adjusting in accordance with the message the product of the offset r and the mass m by the electrical motor rotating the weight unit.--

At page 8, prior to line 6, please insert a new heading and text as follows:

--BRIEF DESCRIPTION OF THE DRAWING--.

At page 8, prior to line 25, please insert a new heading and text as follows:

--BEST MODE FOR CARRYING OUT THE INVENTION--.

The paragraph beginning at page 8, line 31 and ending at page 9, line 15 has been amended as follows:

--Figure 1 shows a system 10 for causing vibration in a first configuration, according to a preferred embodiment of the invention. The system comprises a first electrical motor 11A, a second electrical motor 11B, a first weight element 12A, a second weight element 12B and a tubular housing 15 for accommodating the aforementioned components. Figure 1 illustrates the system in a disassembled form, where the components have been removed from the housing 15. When the system is assembled, the two electrical motors 11A and ~~11 B~~ 11B are coaxially supported by the housing 15 and separated such that the weight elements 12A and 12B fit

~~rotateably~~ rotatably between them. The weight elements 12A and 12B have a similar basic shape. Their diameter is approximately 5 to 20 mm and their length is few ~~millimetres~~ millimeters. The weight elements are driven about a common rotational axis by their respective electrical motors and can rotate in relation to each other. In the preferred embodiment the weight elements can rotate in relation to each other to a limited extent, as will be described in more detail with reference to Figures 2 and 3. In this first configuration, the first and second weight elements 12A and 12B are both generally aligned on the same side of their common rotational axis so that together they form an unbalanced weight unit.--

The paragraph beginning at page 12, line 9 has been amended as follows:

--A magnet 66 is fixed next to the screw 65 so that it exerts a magnetic force on the first weight element 61A to draw it towards the axle 62 about the hinge 63. The screw is used for adjusting the magnetic force to a desired level. In an alternative embodiment, the axle 62 may be ~~magnetised~~ magnetized.--

The paragraph beginning at page 12, line 14 has been amended as follows:

--The weight unit is rotated by an electrical motor using the axle 62 in an angular direction (counter clockwise in Figure 6) such that deceleration of the weight unit 60 tries to turn the first weight element about the hinge 63 against the screw 65. When the weight unit rotates with the axle 62, centrifugal force is applied to the weight elements. The second weight element 61B is fixed to the axle so that it cannot move in relation to the axle 62. Although the first weight element 61A can move about the hinge 63, it stays in contact with the screw 63 as long as the magnetic force exceeds the centrifugal force effecting to the

magnet 66. However, when the centrifugal force effecting to the magnet exceeds the magnetic force, the weight unit assumes its second configuration, shown in Figure 7, wherein the first element turns so that its weight ~~centre~~ center settles as far from the rotational axis as possible. At the same time, the weight unit becomes unbalanced and starts to cause vibration.--

The paragraph beginning at page 13, line 13 has been amended as follows:

--Figure 8 shows a block diagram of a mobile telephone MT comprising a system 10 for causing vibration according to a preferred embodiment of the invention. The mobile telephone MT further comprises a radio block RF for wireless communications with a mobile communications network (not shown) and a speaker SPK for playing different ringing tones, clock alarms, calendar reminder sounds, indication sounds or melodies for informing a user of an incoming message such as a short message, a facsimile message or electronic mail. Additionally, the mobile telephone MT comprises a central processing unit CPU for controlling its operation. The CPU controls the system 10 to make it generate vibration in appropriate circumstances. These circumstances include the following: a change in a melody being played by the mobile telephone MT, receipt of a message, receipt of a particular type of message and the time of day or date reaching a predefined alarm time or date. The mobile telephone MT may be capable of playing music through the speaker SPK. In this case, the vibration can be ~~synchronised~~ synchronized with the music being played though the speaker SPK.--

The paragraph beginning at page 14, line 15 has been amended as follows:

--The agreed scheme can be ~~customised~~ customized by the user or pre-set, for example, at a factory, when the mobile telephone is

being manufactured. For example, a message containing a code "vibrate 1" may refer to a happy vibration tune ("good" vibrations), corresponding to a melody of a song. It may be sent by one individual to another individual as a good luck message. Alternatively, an individual might send an angry or apologetic vibration message. The message causing this might be a text message containing a code "vibrate 2". When the message is received by a mobile telephone of Figure 8, its user becomes aware of the content of the message by means of the vibration specific for this type of message.--

The paragraph beginning at page 15, line 1 has been amended as follows:

--In yet another alternative embodiment, different types of vibration notifications are used to draw a user's attention to a reminder. In this case, the different types of notifications (such as clock alarm, meeting reminder, phone call reminder) can be mapped to different vibration tunes. This allows a user to ~~recognise~~ recognize the reminder based on the type of vibration he feels.--